ABSTRACT OF THE DISCLOSURE

A Zerogon, a zero power identical pair of oppositely-oriented meniscus lens elements mounted in the illumination light path, serves as curved mask support while compensating for optical anomalies such as beam shift and beam deviations produced by other transparent supports for the curved mask. The Zerogon, without affecting the transmission beam characteristics, lets the beam diffract as efficiently as does a regular planar mask, thus preserving the partial coherence parameters and resolution capabilities of projection lithography. This novel optical device is not only expected to clear several barriers for curved mask projection lithography but also find place in other applications where collimated or converging light beams have to travel extra paths without significant aberration in any generic optical system.